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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

LEROUX, ETIENNE PIERRE

ART UNIT	PAPER NUMBER
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2171

DATE MAILED: 08/05/2003

3

Please find below and/or attached an Office communication concerning this application or proceeding.

24

P24

Office Action Summary	Application No.	Applicant(s)	
	09/886,851	CONLEY ET AL.	
	Examiner	Art Unit	
	Etienne P LeRoux	2171	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
 THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-32 is/are pending in the application.
 - 4a) Of the above claim(s) 1-12 and 24-32 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 13-23 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 20 June 2001 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 - a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) Interview Summary (PTO-413) Paper No(s) _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

Election/Restriction

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

Restriction: 1st Grouping

I Claims 27-29, drawn to a computer system, classified in class 370, subclass 252

Restriction: 2nd Grouping

II a Claims 1-10, drawn to generating a network replication topology, classified in class 709, subclass 223

II b Claims 11-12, drawn to populating a directory service, classified in class 379, subclass 201.1

II c Claims 13-23, drawn to generating network site and site link information, classified in class 707, subclass 1

II d Claims 24-26, drawn to computer medium for automatically generating a network topology for a directory service, classified in class 707, subclass 200

II e Claims 30-32, drawn to apparatus for reading router files and generating sites and site links, classified in class 370, subclass 229

2. Inventions I and II are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as

claimed because the apparatus claims 27-29 draw to a computer system does not require the subcombination as claimed, i.e., claims 1-26 and claims 30-32 which include limitations such as generating a network site and link information. The subcombination has separate utility such as generating a network replication topology.

3. Furthermore, this application contains claims directed to the following patentably distinct species of the claimed invention: Invention II a drawn to generating a network replication topology, Invention II b drawn to populating a directory service, Invention II c drawn to generating network site and site link information, Invention II d drawn to computer medium for automatically generating a network topology for a directory service, Invention II e drawn to apparatus for reading router files and generating sites and site links

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claim is generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

4. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

5. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

6. A telephone call was made to Mr. John Henkhaus on July 10, 2003, to request an oral election to the above restriction requirement. Claims 13-23 were elected with traverse.

7. Claims 1-12 and 24-32 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the election requirement in telephone call of July 10, 2003.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claim 13 is rejected under 35 U.S.C. 102(e) as being anticipated by Pub No

2002/0065941 issued to Kaan et al (hereafter Kaan '941).

Regarding claim 13, Kaan '941 discloses:

reading preprocessing information, the preprocessing information including override information for nullifying information associated with one or more sites or one or more site links from one or more router configuration files [paragraph 0038]

reading router interface information from a router configuration file associated with each of one or more routers, wherein one or more site references is generated by identifying a sub-network on a Local Area Network (LAN) [Fig 1, 130] interface and one or more site link references by identifying a Wide Area Network (WAN) [Fig 1, 110] interface

wherein the override information is applied to the site and site link references [Fig 1, 100]

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kaan '941

Regarding claim 14, Kaan '941 discloses generating a router name [paragraph 0078] but does not disclose generating a name exception. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kaan '941 to include generating a name exception or the purpose of determining a change in names.

5. Claims 15-17, 20 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaan '941 as applied to claim 14 above, and further in view of US Pat No 4,853,843 issued to Ecklund (hereafter Ecklund '843)

Regarding claims 15 and 16, Kaan '941 discloses the essential elements of the claimed invention as noted above except for a temporary site name. Ecklund '843 discloses a temporary site name. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kaan '941 to include a temporary site name as taught by Ecklund '843 for the purpose of processing requests when failures occur [col 16, line 14]

Regarding claim 17, the combination of Kaan '941 and Ecklund '843 disclose the essential elements of the claimed invention as noted above except for generating a sub-network with the temporary site name. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Kaan '941 and Ecklund '843 to include a sub-network with a temporary name for then purpose of creating a LAN [refer abstract of Kaan '843].

Regarding claims 20 and 23, Kaan '941 discloses the essential elements of the claimed invention as noted above except for merging one or more temporary site names and associated partial site links, site links, sub-network references, and router names into one or more newly created complete site names, and deleting from processing the one or more temporary site names merged into the one or more newly created completed site names, thereby reducing the quantity of temporary site names and increasing the quantity of site references associated with one or more temporary site names. Ecklund '843 discloses merging one or more temporary site names and associated partial site links, site links, sub-network references, and router names into one or more newly created complete site names, and deleting from processing the one or more temporary site names merged into the one or more newly created completed site names, thereby reducing the quantity of temporary site names and increasing the quantity of site references associated with one or more temporary site names [Fig 10]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kaan '941 to include merging one or more temporary site names and associated partial site links, site links, sub-network references, and router names into one or more newly created complete site names, and deleting from processing the one or more temporary site names merged into the one or more newly created completed site names, thereby reducing the quantity of temporary site names and increasing the quantity of site references associated with one or more temporary site names as taught by Ecklund '843 for the purpose of merging virtual partitions in a distributed data base system [col 1, lines 5-10].

6. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kaan '941 as applied to claim 13 and further in view of in view of US Pat No 5,968,121 issued to Logan et al (hereafter Logan '121)

Regarding claim 18, Kaan '941 discloses the essential elements of the claimed invention as noted above except for:

reading a list of one or more site names from a data storage associated with a network management system

reading from the data storage a list of one or more preprocessing site links and associated site link costs

comparing one or more site names parsed from one or more preprocessing site links to the list of one or more site names from the data storage and discarding one or more preprocessing site links upon failure to match

reading from the data storage a list of one or more preprocessing address blocks and at least one from a set consisting of a preprocessing site name associated with the one or more preprocessing address blocks or a command to ignore the one or more preprocessing address blocks

comparing the preprocessing site name associated with the one or more preprocessing address blocks to the list of one or more site names from the data storage and discarding one or more preprocessing address blocks upon a failure to match

reading a list of one or more domain controllers from the data storage and associating the one or more domain controllers to an Internet Protocol address and to a site name obtained from a network management system

determining a domain associated with the one or more domain controllers

comparing the Internet Protocol address for each of the listed domain controllers to the list of one or more preprocessing address blocks

whereupon the step of reading preprocessing information aborts if the Internet Protocol address is within one or more preprocessing address blocks and the preprocessing site name associated with the one or more preprocessing address blocks is not the same as the site name obtained from the network management system that is associated with the one or more domain controllers whereupon the step of reading preprocessing information continues excluding the one or more domain controllers from further processing if the Internet Protocol address is within one or more preprocessing address blocks associated with the command to ignore the one or more preprocessing address blocks. Logan '121 discloses reading a list of one or more site names from a data storage associated with a network management system

reading from the data storage a list of one or more preprocessing site links and associated site link costs

comparing one or more site names parsed from one or more preprocessing site links to the list of one or more site names from the data storage and discarding one or more preprocessing site links upon failure to match

reading from the data storage a list of one or more preprocessing address blocks and at least one from a set consisting of a preprocessing site name associated with the one or more preprocessing address blocks or a command to ignore the one or more preprocessing address blocks

comparing the preprocessing site name associated with the one or more preprocessing address blocks to the list of one or more site names from the data storage and discarding one or more preprocessing address blocks upon a failure to match

reading a list of one or more domain controllers from the data storage and associating the one or more domain controllers to an Internet Protocol address and to a site name obtained from a network management system

determining a domain associated with the one or more domain controllers
comparing the Internet Protocol address for each of the listed domain controllers to the list of one or more preprocessing address blocks

whereupon the step of reading preprocessing information aborts if the Internet Protocol address is within one or more preprocessing address blocks and the preprocessing site name associated with the one or more preprocessing address blocks is not the same as the site name obtained from the network management system that is associated with the one or more domain controllers
whereupon the step of reading preprocessing information continues excluding the one or more domain controllers from further processing if the Internet Protocol address is within one or more preprocessing address blocks associated with the command to ignore the one or more

preprocessing address blocks [col 16, lines 1-28.] It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kaan '941 to include reading a list of one or more site names from a data storage associated with a network management system
reading from the data storage a list of one or more preprocessing site links and associated site link costs

comparing one or more site names parsed from one or more preprocessing site links to the list of one or more site names from the data storage and discarding one or more preprocessing site links upon failure to match

reading from the data storage a list of one or more preprocessing address blocks and at least one from a set consisting of a preprocessing site name associated with the one or more preprocessing address blocks or a command to ignore the one or more preprocessing address blocks

comparing the preprocessing site name associated with the one or more preprocessing address blocks to the list of one or more site names from the data storage and discarding one or more preprocessing address blocks upon a failure to match

reading a list of one or more domain controllers from the data storage and associating the one or more domain controllers to an Internet Protocol address and to a site name obtained from a network management system

determining a domain associated with the one or more domain controllers

comparing the Internet Protocol address for each of the listed domain controllers to the list of one or more preprocessing address blocks

whereupon the step of reading preprocessing information aborts if the Internet Protocol address is within one or more preprocessing address blocks and the preprocessing site name associated with the one or more preprocessing address blocks is not the same as the site name obtained from the network management system that is associated with the one or more domain controllers

whereupon the step of reading preprocessing information continues excluding the one or more domain controllers from further processing if the Internet Protocol address is within one or more preprocessing address blocks associated with the command to ignore the one or more preprocessing address blocks as taught by Logan '121 for the purpose of automating network directory services [col 2, lines 40-45]

7. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Kaan '941 and Logan '121 as applied to claim 18, and further in view of US Pat No 5,850,526 issued to Chou (hereafter Chou '526).

Regarding claim 19, Kaan '941 discloses the essential elements of the claimed invention as noted above except for comparing an address of each of the one or more site references, one or more site link references, and one or more sub-network references to the one or more preprocessing address blocks

deleting from processing the one or more site references, the one or more site link references, and the one or more sub-network references having an address being a subset or superset of the one or more preprocessing address blocks and deleting from processing the partial site link associated with discontinued one or more site link references

and if the temporary site name contains no site references, deleting from processing the temporary site name and associated one or more router names, partial site links, site link references, and sub-network references.

Chou '526 discloses comparing an address of each of the one or more site references, one or more site link references, and one or more sub-network references to the one or more preprocessing address blocks

deleting from processing the one or more site references, the one or more site link references, and the one or more sub-network references having an address being a subset or superset of the one or more preprocessing address blocks and deleting from processing the partial site link associated with discontinued one or more site link references

and if the temporary site name contains no site references, deleting from processing the temporary site name and associated one or more router names, partial site links, site link references, and sub-network references [claim 1]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kaan '941 to include comparing an address of each of the one or more site references, one or more site link references, and one or more sub-network references to the one or more preprocessing address blocks deleting from processing the one or more site references, the one or more site link references, and the one or more sub-network references having an address being a subset or superset of the one or more preprocessing address blocks and deleting from processing the partial site link associated with discontinued one or more site link references

and if the temporary site name contains no site references, deleting from processing the temporary site name and associated one or more router names, partial site links, site link references, and sub-network references as taught by Chou '526 for the purpose compressing data on a network having arbitrary LAN stations [col 3, lines 45-50]

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Kaan '941 and Logan '121 as applied to claim 18 and further in view of US Pat No 6,442,602 issued to Choudhry (hereafter Choudhry '602).

Regarding claim 21, Kaan '941 discloses the essential elements of the claimed invention as noted above except for processing the one or more sub-network references to ensure that sub-network references are not duplicated, processing the one or more sub-network references to ensure that the network site information is minimized, and merging the one or more sub-network

references associated with one or more temporary site names into the one or more site references associated with the same one or more temporary site names. Choudhry '602 discloses processing the one or more sub-network references to ensure that sub-network references are not duplicated, processing the one or more sub-network references to ensure that the network site information is minimized, and merging the one or more sub-network references associated with one or more temporary site names into the one or more site references associated with the same one or more temporary site names [col 7, lines 15-45]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kaan '941 to include processing the one or more sub-network references to ensure that sub-network references are not duplicated, processing the one or more sub-network references to ensure that the network site information is minimized, and merging the one or more sub-network references associated with one or more temporary site names into the one or more site references associated with the same one or more temporary site names as taught by Choudhry '602 for the purpose of quickly and efficiently creating and managing subdomain names [col 4, lines 30-31]

Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Kaan '941 and Logan '121 as applied to claim 18 and further in view of US Pat No 5,872,786 issued to Shobatake (hereafter Shobatake '786).

Regarding claim 22, Kaan '941 discloses the essential elements of the claimed invention as noted above except for generating a site link between one or more temporary site names, comprising the steps of processing each partial link associated with each of the one or more temporary site names to generate a valid site link based on matching a first partial site link

associated with a first temporary site name with only a second partial site link associated with a second temporary site name, reading a list of one or more site links to determine if an existing site link between the first temporary site name and the second temporary site name exists, upon existence of an existing site link, comparing a bandwidth of the existing site link to a bandwidth of the valid site link, upon the bandwidths being equal, summing the bandwidths to create a summed bandwidth and associating the summed bandwidth with the existing site link and discarding the valid site link, upon the bandwidths being unequal, maintaining the existing or valid full site link with a larger bandwidth and discarding the other of the existing or valid full site link, upon existence of the existing full site link, generating a valid site link between the first temporary site name and the second temporary site name, the valid site link including a first partial link associated with the first temporary site name and a second partial site link associated with the second temporary site name comparing the bandwidth of the first partial site link to the bandwidth of the second partial site link and upon the bandwidths being equal, generating a first link cost based on the equal bandwidth and associating the first site link cost with the valid site link, upon the bandwidths being unequal, generating a second site link cost based on the smaller bandwidth and associating the second site link cost with the valid site link. Shobatake '786 discloses generating a site link between one or more temporary site names, comprising the steps of processing each partial link associated with each of the one or more temporary site names to generate a valid site link based on matching a first partial site link associated with a first temporary site name with only a second partial site link associated with a second temporary site name, reading a list of one or more site links to determine if an existing site link between the first temporary site name and the second temporary site name exists, upon existence of an existing

site link, comparing a bandwidth of the existing site link to a bandwidth of the valid site link, upon the bandwidths being equal, summing the bandwidths to create a summed bandwidth and associating the summed bandwidth with the existing site link and discarding the valid site link, upon the bandwidths being unequal, maintaining the existing or valid full site link with a larger bandwidth and discarding the other of the existing or valid full site link, upon existence of the existing full site link, generating a valid site link between the first temporary site name and the second temporary site name, the valid site link including a first partial link associated with the first temporary site name and a second partial site link associated with the second temporary site name comparing the bandwidth of the first partial site link to the bandwidth of the second partial site link and upon the bandwidths being equal, generating a first link cost based on the equal bandwidth and associating the first site link cost with the valid site link, upon the bandwidths being unequal, generating a second site link cost based on the smaller bandwidth and associating the second site link cost with the valid site link [col 15, line 62 through col 16, line 8]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kaan '941 to include generating a site link between one or more temporary site names, comprising the steps of processing each partial link associated with each of the one or more temporary site names to generate a valid site link based on matching a first partial site link associated with a first temporary site name with only a second partial site link associated with a second temporary site name, reading a list of one or more site links to determine if an existing site link between the first temporary site name and the second temporary site name exists, upon existence of an existing site link, comparing a bandwidth of the existing site link to a bandwidth of the valid site link, upon the bandwidths being equal, summing the bandwidths to create a

summed bandwidth and associating the summed bandwidth with the existing site link and discarding the valid site link, upon the bandwidths being unequal, maintaining the existing or valid full site link with a larger bandwidth and discarding the other of the existing or valid full site link, upon existence of the existing full site link, generating a valid site link between the first temporary site name and the second temporary site name, the valid site link including a first partial link associated with the first temporary site name and a second partial site link associated with the second temporary site name comparing the bandwidth of the first partial site link to the bandwidth of the second partial site link and upon the bandwidths being equal, generating a first link cost based on the equal bandwidth and associating the first site link cost with the valid site link, upon the bandwidths being unequal, generating a second site link cost based on the smaller bandwidth and associating the second site link cost with the valid site link as taught by Shobatake '786 for the purpose of increasing process migration without increasing a system cost

[col 6, lines 5-15]

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Etienne LeRoux whose telephone number is (703) 305-0620. The examiner can normally be reached on Monday – Friday from 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic, can be reached on (703) 308-1436.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Etienne LeRoux


July, 21, 2003


FRANTZ COBY
PRIMARY EXAMINER